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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/076,041	02/13/2002	Indu Bhusan Chatterjee	3030.004USU	7417

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EXAMINER
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WALLS, DIONNE A

ART UNIT	PAPER NUMBER
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1731

DATE MAILED: 12/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/076,041

Applicant(s)

CHATTERJEE, INDU BHUSAN

Examiner

Dionne A. Walls

Art Unit

1731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 September 2004.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,53-59,61-91 and 95-106 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1, 53-58, 79-91 and 95-96 is/are rejected.  
7) ☒ Claim(s) 59,61-78 and 97-106 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 and 79-96 are rejected under 35 U.S.C. 102(b) as anticipated by Mentzel et al (US. Pat. No. 5,423,336).

Mentzel discloses all that is recited in the claims (see cols. 2-4). Since Mentzel states that the activated carbon (corresponding to the claimed "charcoal") particles can have a screen size ranging from 177-500 microns (approximately 35-80 mesh), it is evident that this reference envisions the selection of charcoal particles having the claimed mesh size.

Regarding claims 79-95, it would follow that the filter of Applicant's Admitted Art modified by Mentzel et al would demonstrate these claimed functions/attributes since structurally, the filter of the applied art is similar, if not substantially identical, to that which is claimed. Where the claimed and prior art product/apparatus is identical or substantially identical in structure or composition, a *prima facie* case of either anticipation or obviousness has been established. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430,433 (CCPA 1977). In other words, when the structure recited in the reference is substantially identical to that of the claims, the claimed properties or functions are presumed to be inherent.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 53-58, 79-91 and 95-96 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Art in view of Mentzel et al (US. Pat. No. 5,423,336).

In the instant specification page 14, lines 8-15, Applicant admits that typical charcoal filter cigarettes have a first conventional cellulose acetate fiber filter, acting as the mouthpiece, the length of which may vary according to convenience, e.g. 10-15 mm; a second conventional cellulose acetated fiber filter, acting as a barrier between a charcoal bed and a tobacco portion of the cigarette to prevent infiltration of charcoal into the tobacco, the length of which may be 2-4 mm; and a charcoal filter bed located between the two conventional cellulose fiber filters, the length of the activated charcoal bed varying depending on the amount of charcoal used, e.g. 4.5-5.5 mm per 100 mg; or 9-11 mm per 200 mg; or 13-16 mm per 300 mg, etc. While Applicant may not state that the charcoal used in the charcoal bed of the known charcoal filter cigarettes has the claimed charcoal particles and a grain size ranging between 25-100 mesh, Mentzel discloses a filter cigarette having a charcoal bed filter section sandwiched between cellulose acetated filter sections, the charcoal (activated carbon) particles having a screen mesh width in the range from 177-500 microns (corresponding to approximately

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35-80 mesh – which is within the claimed range). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to incorporate charcoal particles having this mesh size into the charcoal bed of charcoal filter cigarettes since utilizing charcoal particles of this size, in charcoal filter cigarettes, is known as evidenced by the Mentzel et al reference.

Regarding claims 79-87 and 95, it would follow that the filter of Applicant's Admitted Art modified by Mentzel et al would demonstrate these claimed functions/attributes since structurally, the filter of the applied art is similar, if not substantially identical, to that which is claimed. Where the claimed and prior art product/apparatus is identical or substantially identical in structure or composition, a *prima facie* case of either anticipation or obviousness has been established. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430,433 (CCPA 1977). In other words, when the structure recited in the reference is substantially identical to that of the claims, the claimed properties or functions are presumed to be inherent.

#### ***Allowable Subject Matter***

5. Claims 59, 61-78 and 97-106 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

#### ***Response to Arguments***

6. The declaration under 37 CFR 1.132 filed September 23, 2004 is insufficient to overcome the rejection of claims 1, 53-58, 79-91 and 95-96 based upon the Mentzel

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reference as set forth in the last Office action because the facts presented are not germane to the rejection at issue.

The declaration focuses on the technical differences with respect to the filter disclosed in the Mentzel reference and the filter of the present invention; however, the claims are presently recited such that they are open to being read on by a reference having a filter with those specific differences (i.e. relating to the filter's construction, tar-removing abilities, and aromatic substance addition), due to the "comprising" language in the preamble.

Additionally, while the Déclaration points out that Applicant's have used different charcoal filters having specific amounts of specific mesh size of carbon particles, i.e. 0.2 g of mesh BS 44/52, the independent claims are not limited to a specific mesh and amount. Also, the Examiner believes that while the Mentzel reference may be silent as to the amount of charcoal particles, it does give specificity to the size of these particles. One having ordinary skill in the art may select any mesh size in the range disclosed. For instance, one may opt to provide charcoal particles having a mesh size of 50. This would satisfy the limitation of the independent claims, since such charcoal particles would pass through a 44 mesh screen but be retained on a 52 mesh screen. Also, even though Mentzel et al is silent with respect to the amount of charcoal particles to be used, it follows that one of ordinary skill would optimize the amount so that the quantity providing for the most effective removal of toxic components is utilized.

Lastly, the Declaration discusses the object of Mentzel's use of activated charcoal to remove "an impurity" for cigarette smoke, and contrasts that with the instant

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invention's use of charcoal for the purpose of removing p-BSQ. The Examiner believes that one having ordinary skill in the art would have optimized the amount of charcoal having a mesh size of 50, for instance, for removal of any of a number of "impurities", and such amount would obviously enable at least some reduction of p-BSQ. The declaration fails to provide evidence indicating that it is only at a specific amount and mesh size that any, even minor, amount of p-BSQ is reduced. In other words, there is no evidence that only at a certain amount and mesh size can p-BSQ be removed, and such removal is not possible with the filter of Mentzel et al.

7. Applicant's arguments filed September 23, 2004 have been fully considered but they are not persuasive.

- Applicant presents arguments which correlate to those presented/discussed in the Declaration filed under 37 CFR 1.132. The Examiner feels that these arguments have been addressed in the above paragraph.

### ***Conclusion***

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

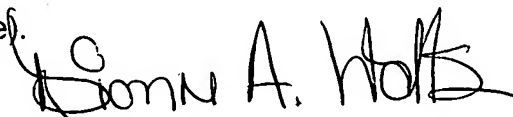
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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dionne A. Walls whose telephone number is (571) 272-1195. The examiner can normally be reached on Mon-Fri, 7AM - 4:30PM (Every other Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven P. Griffin can be reached on (571) 272-1189. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Dionne A. Walls  
Primary Examiner  
Art Unit 1731

December 21, 2004